

**WHAT IS CLAIMED IS:**

1. A printing apparatus connectable to plural types  
of input units for supplying printing data, comprising:  
5      plural types of printing modes;

means for recognizing the type of an input unit  
connected; and

10     means for selecting a mode suitable for printing of  
printing data supplied from the connected input unit from  
among the plural types of printing modes according to said  
recognition.

2. A printing apparatus as claimed in Claim 1, said  
apparatus being capable of printing through first and second  
15    printing operations whose printing positions are aligned  
with each other, said selection being made according to  
a judgment on whether said recognition and/or a process  
of setting an adjusting value for aligning the printing  
positions has already been performed or not.

20     3. A printing apparatus as claimed in Claim 2, wherein  
said setting process is enabled when a predetermined type  
of input unit among the plural types of input units is  
connected.

25     4. A printing apparatus as claimed in Claim 3, further  
comprising means for holding information indicating that

said setting process has been performed.

5. A printing apparatus as claimed in Claim 4, wherein said selection means selects the same printing mode as that in the case in which the predetermined type of input unit is connected if the information is held even when said recognition means recognizes the connection of an input unit other than the predetermined type of input unit.

10 6. A printing apparatus as claimed in Claim 3, wherein it is not judged whether said setting process has been performed or not when the connection of the predetermined type of input unit is recognized.

15 7. A printing apparatus as claimed in Claim 3, wherein the information indicating that said setting process has been performed is held in the predetermined type of input unit, and the information is transmitted prior to printing data when the predetermined type of input unit is connected.

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8. A printing apparatus as claimed in Claim 3, wherein the connection of the predetermined input unit is recognized based on a signal from the unit.

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9. A printing apparatus as claimed in Claim 3, further comprising a plurality of connecting means, wherein the connection of the predetermined input unit is recognized

based on the connection of the input unit to a predetermined one of the connecting units.

10. A printing apparatus as claimed in Claim 3, further comprising:

5 means for performing a main scan of printing means formed by arranging a plurality of printing elements relative to a printing medium in a direction different from the direction of the arrangement; and

10 means for performing a relative sub-scan of the printing medium after the main scan in a direction orthogonal to the direction of the main scan,

15 wherein the first and second printing operations are printing operations which are performed through main scanning of said printing means in a forward direction and a backward direction, respectively.

11. A printing apparatus as claimed in Claim 3, wherein said selection means selects a printing mode for printing at a high speed when the connection of the predetermined type of input unit is recognized and selects a mode for printing at a low speed when the connection is not recognized.

20 25 12. A printing apparatus as claimed in Claim 11, wherein the printing mode for printing at a high speed is a mode in which printing is performed in the forward direction and backward direction and wherein the printing mode for

printing at a low speed is a mode in which printing is performed in either of the forward and backward directions.

13. A printing apparatus as claimed in Claim 11,  
5 wherein the mode for printing at a low speed is a mode of printing in which the speed of the main scan is lower than that in the mode for printing at a high speed.

14. A printing apparatus as claimed in Claim 11,  
10 wherein the mode for printing at a low speed is a mode in which the number of the elements involved in printing is limited compared to the mode for printing at a high speed.

15. A printing apparatus as claimed in Claim 14,  
15 wherein a plurality of rows of the printing elements are arranged for a printing agent in the same tone in the direction of the main scan and wherein the number of rows of the printing elements used for printing in the mode for printing at a low speed is smaller than that in the mode  
20 printing at a high speed.

16. A printing apparatus as claimed in Claim 11,  
wherein;

25 the sub-scan is performed in an amount smaller than the width of the array of the plurality of printing elements during each interval between the main scans;  
an image can be formed on the printing medium by a

plurality of main scans according to pixel arrangements that are in a complementary relationship with respect to the same image area; and

the mode for printing at a low speed is a mode in which  
5 printing is performed with a greater number of main scans than in the mode for printing at a high speed.

17. A printing apparatus connectable to plural types of input units for supplying printing data, comprising:

10 plural types of image processing modes having different resolutions;

means for recognizing the type of an input unit connected; and

15 means for selecting a mode for processing printing data supplied from the connected input unit from among the plural types of image processing modes according to said recognition.

18. A printing apparatus as claimed in Claim 17, said apparatus being capable of printing through first and second printing operations whose printing positions are aligned with each other and capable of a process of setting an adjusting value for aligning the printing positions when a predetermined type of input unit among the plural types 25 of input unit is connected.

19. A printing apparatus as claimed in Claim 17,

wherein when the connection of the predetermined type of input unit is not recognized, an image processing mode is selected which provides a resolution lower than that in the case in which the connection is recognized.

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20. A method for controlling a printing apparatus which is connectable to plural types of input units for supplying printing data and has plural types of printing modes, said method comprising the steps of:

10        recognizing the type of an input unit connected; and  
              selecting a mode suitable for printing of printing data supplied from the connected input unit from among the plural types of printing modes according to said recognition.

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21. A method for controlling a printing apparatus as claimed in Claim 20, said apparatus being capable of printing through first and second printing operations whose printing positions are aligned with each other, said selection being  
20        made according to a judgment on whether said recognition and/or a process of setting an adjusting value for aligning the printing positions has already been performed or not.